

### Abstract of the Disclosure

A field emission array adopting carbon nanotubes as an electron emitter source, wherein the array includes a rear substrate assembly including cathodes formed as stripes over a rear substrate and carbon nanotubes; a front substrate assembly including anodes formed as stripes  
5 over a front substrate with phosphors being deposited on the anodes, a plurality of openings separated by a distance corresponding to the distance between the anodes in a nonconductive plate, and gates formed as stripes perpendicular to the stripes of anodes on the nonconductive plate with a plurality of emitter openings corresponding to the plurality of openings. The  
10 nonconductive plate is supported and separated from the front substrate using spacers. The rear substrate assembly is combined with the front substrate assembly such that the carbon nanotubes on the cathodes project through the emitter openings.